

Navy Personnel Research and Development Center

San Diego, California 92152-7250

TN-97-3 December 1996



Analysis of Unplanned Losses From Deploying Ships

Patricia J. Thomas

19970113 090

DTIC QUALITY INSPECTED 1

Approved for public release; distribution is unlimited.

**Analysis of Unplanned Losses
From Deploying Ships**

Patricia J. Thomas

Approved and released by
Thomas A. Blanco
Director
Personnel and Organizational Assessment Department

Approved for public release;
distribution is unlimited

Navy Personnel Research and Development Center
53335 Ryne Road
San Diego, California 92152-7250

REPORT DOCUMENTATION PAGE			Form Approved OMB No. 0704-0188	
Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503.				
1. AGENCY USE ONLY (Leave blank)		2. REPORT DATE December 1996		3. REPORT TYPE AND DATE COVERED Final--April 1994-May 1996
4. TITLE AND SUBTITLE Analysis of Unplanned Losses From Deploying Ships			5. FUNDING NUMBERS Program Element: Work Unit: N0002295PODW593	
6. AUTHOR(S) Patricia J. Thomas				
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Navy Personnel Research and Development Center 53335 Ryne Road San Diego, CA 92152-7250			8. PERFORMING ORGANIZATION REPORT NUMBER NPRDC-TN-97-3	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES) Chief of Naval Personnel Special Assistant for Women's Policy (Pers-00W) Washington, DC 20370			10. SPONSORING/MONITORING AGENCY REPORT NUMBER	
11. SUPPLEMENTARY NOTES Functional Area: Personnel and Organizational Assessment Product Line: Women and Multicultural Research Effort: Integration of Women				
12a. DISTRIBUTION/AVAILABILITY STATEMENT Approved for public release; distribution is unlimited.			12b. DISTRIBUTION CODE A	
13. ABSTRACT (Maximum 200 words) <p>This study was conducted to investigate the number of pregnancy losses that are incurred by ships in the 6-month period prior to deployment. Additionally, the reasons why some enlisted crew members do not deploy with their ships were determined. Data were extracted from all available Enlisted Manning Inquiry Reports and final Personnel Manning Assistance Reports from deploying gender-integrated surface ships in the Atlantic and Pacific fleets. Since these data are retained for less than 2 years, the sample was limited to 24 ships. Analyses consisted solely of frequencies and percentages.</p> <p>Medical problems and administrative discharges were the most frequent causes of unplanned losses from deploying ships. While pregnancy accounted for 20 percent of the losses, commands were less likely to request a replacement for the woman than when the vacancy occurred for some other reason. Only 8 percent of the non-deploying personnel were pregnant. Seventy-three percent of the personnel who were left behind did not deploy because of disciplinary and medical reasons.</p> <p>Because the documents reviewed for this study are only available as paper copies, and are submitted by all Navy activities (except submarines), it is recommended that an automated system be established.</p>				
14. SUBJECT TERMS Pregnancy, deployment, ships, attrition			15. NUMBER OF PAGES 12	
			16. PRICE CODE	
17. SECURITY CLASSIFICATION OF REPORT UNCLASSIFIED	18. SECURITY CLASSIFICATION OF THIS PAGE UNCLASSIFIED	19. SECURITY CLASSIFICATION OF ABSTRACT UNCLASSIFIED	20. LIMITATION OF ABSTRACT UNLIMITED	

Foreword

This analysis of the impact of pregnancy on deploying ships was funded by work request N0002295PODW593. It was sponsored by the Women in the Navy Advisor to the Chief of Naval Personnel.

The author wishes to thank CDR Maureen Davidovich for identifying the documents that would provide the information needed for this investigation, and her help in gaining access to the documents.

THOMAS A. BLANCO
Director
Personnel and Organizational Assessment Department

Summary

Purpose

This study was conducted to investigate the number of pregnancy losses that are incurred by ships in the 6-month period prior to deployment. Additionally, the reasons why some enlisted crew members do not deploy with their ships were determined.

Approach

Data were extracted from all available Enlisted Manning Inquiry Reports and final Personnel Manning Assistance Reports from deploying gender-integrated surface ships in the Atlantic and Pacific fleets. Since these data are retained for less than 2 years, the sample was limited to 24 ships. Analyses consisted solely of frequencies and percentages.

Findings

Medical problems and administrative discharges were the most frequent causes of unplanned losses from deploying ships. While pregnancy accounted for 20 percent of the losses, commands were less likely to request a replacement for the woman than when the vacancy occurred for some other reason.

Only 8 percent of the non-deploying personnel were pregnant. Seventy-three percent of the personnel who were left behind did not deploy because of disciplinary and medical reasons.

Recommendations

Because the documents reviewed for this study are only available as paper copies, and are submitted by all Navy activities (except submarines), it is recommended that an automated system be established.

Contents

	Page
Introduction	1
Method	1
Results	2
Enlisted Manning Inquiry Reports	2
Personnel Manning Reports	4
Discussion and Conclusions	4
Recommendation	5
References	7
Distribution List	9

List of Tables

1. Type of Surface Ships in Analysis	2
2. Unplanned Losses 6 Months Prior to 1 Month After Deployment	3
3. Relief Requested by Commands for Unplanned Loss	3
4. Reasons Why Personnel Did Not Deploy	4

Introduction

As the Navy proceeds with its plan to embark women in combatant ships, the potential impact of pregnancy upon readiness has been of concern. Women, of course, have been assigned to noncombatant ships since 1978. Due to the large crews of most of these ships, the loss of pregnant women on or before the 20th week of gestation has not been a major problem. Combatants, however, have a more critical mission and higher operational tempo than noncombatants. They deploy regularly and, because unplanned personnel losses cannot be rapidly replaced, suffer more when billets are unfilled than do noncombatants.

In 1995, the Navy Personnel Research and Development Center was tasked to investigate the extent to which pregnancy impacts upon deployability. Past studies of this issue have relied on surveys or interviews (Thomas, Thomas, & McClintock, 1991; Roper Organization, 1992). This study analyzed manning documents that had been submitted by deploying ships.

Method

All available Enlisted Manning Inquiry Reports (EMIR) and final Personnel Manning Assistance Reports (PERSMAR) for gender-integrated surface ships in the Atlantic and Pacific Fleets were reviewed for this study. EMIRs are used by all Navy activities, except submarines and submarine support staffs, to inform the Enlisted Personnel Management Center about personnel losses that have or will occur in the upcoming months. Final PERSMARs are sent after ships leave port on an extended deployment (CINCLANTFLT/CINCPACFLT, 1992). They list the names of service members who missed the movement, the reason why they did not deploy, and, if appropriate, request assistance in filling a critical deficiency. Because both EMIRs and PERSMARs are paper records of messages, they usually are retained for less than 2 years due to limited storage space.

The design of the study required reviewing EMIRs for the 6 months prior to and 1 month following the deployment of a gender-integrated ship. The sample was limited by the availability of records at the time of data gathering. In the Atlantic Fleet, documents were available for ships that departed between March 1995 and May 1996; the dates for the Pacific Fleet were April 1994 to December 1995. Although each fleet has recently integrated an aircraft carrier, only ships belonging to the surface forces were used in the analysis. Table 1 shows the ship types from each fleet that were included in the analysis. The crews consisted of a total of 2,065 enlisted women and 9,424 enlisted men. While the percentage of women in each ship ranged from 8 percent to 33 percent, their overall representation was 18 percent.

The data were extracted on site at Surface Forces Atlantic (SURFLANT), Norfolk, Virginia in May 1996 and Surface Forces Pacific (SURFPAC), San Diego, California in December 1995. The amount of information in the EMIRs varied. The rate of the individual who had become an unplanned loss was always indicated. The reason for the loss was often vague, for example, simply citing UPL (unplanned loss).¹ First names were rarely given, so the gender of the service member

¹These cases were not included in the analysis.

could not be discerned unless the reason was pregnancy. Although information on planned losses was sometimes provided, only unplanned losses were considered in the analysis. Final PERSMARS tended to be terse. Often times, names were omitted but reasons for individuals not sailing with the ship were usually given.

Table 1
Type of Surface Ships in Analysis

	Atlantic	Pacific	Total
Destroyer Tender (AD)	---	2	2
Ammunition Ship (AE)	2	4	6
Oiler/Combat Support (AO, AOE)	4	3	7
Repair/Salvage (AR, ARS)	1	2	3
Destroyer (DD, DDG)	2	1	3
Amphibious Ship (LCC, LSD)	1	2	3
Total	10	14	24

Only frequencies and percentages could be computed from the data. While comparisons of losses by gender would have been useful, the necessary data were not available.

Results

Enlisted Manning Inquiry Reports

The tallies of unplanned losses for 1 to 6 months prior to deployment, the month of deployment, and 1 month after deployment are presented in Table 2. As expected, the most active period for attempting to fill vacancies was 1 to 2 months prior to sailing. Some ships sent several messages during this time period, suggesting that the unplanned losses may not have originated just before the deployment; instead, commands were requesting relief at that time.

Medical problems that precluded serving in a deploying ship and administrative separations (ADSEP) were the most frequent reasons for unplanned losses (40% and 22%, respectively). Pregnancy accounted for 20 percent of the losses. Viewed in another context, approximately 2 percent of the women in these ships became pregnant in the 6 months prior to deployment. Half of the losses occurred in the period 1 to 2 months before the deployment, a particularly disruptive time to lose personnel. Not only are people who participated in the work-ups no longer a part of the crew, but finding replacements before sailing is difficult.

Although the Enlisted Transfer Manual (Chapter 26) directs that EMIRs should be submitted when the loss has a significant impact on unit readiness, it cannot be assumed that all of the vacated billets were critical. At times the messages appeared to be for information purposes and ended with a statement that no relief was requested. Often, however, all or many of the vacancies were considered critical for the upcoming deployment and needed to be filled.

Table 2

Unplanned Losses 6 Months Prior to 1 Month After Deployment

	Months Relative to Deployment					Total
	5-6 Mos. Prior	3-4 Mos. Prior	1-2 Mos. Prior	Deploying Month	1 Month After	
Medical	12	16	36	13	4	81
ADSEP ^a	4	7	27	5	1	44
Pregnancy	---	16	23	1	---	40
Legal /UA	3	3	10	1	2	19
Family	1	5	4	1	---	11
Unplanned Loss	1	1	---	3	---	5
Total	21	48	100	24	7	200

^aAdministrative Separation. This category includes unspecified ADSEPs, failure to pass physical requirements test, personality disorder, and parenthood.

Table 3 presents information on whether replacements for departing personnel or no relief was requested. Because pregnancy is the salient variable in this study, the data are shown by type of unplanned loss and paygrade. Not surprisingly, the higher the paygrade of the lost service member the greater the urgency that a replacement be assigned before the deployment.

Table 3

Relief Requested by Commands for Unplanned Loss

	E-1 to E-3	E-4	E-5 to E-6	CPO	Total
Pregnancy Loss					
Replacement	5	7	4	1	17
No Relief	9	13	1	---	23
Other Loss					
Replacement	14	21	48	16	99
No Relief	29	13	19	---	61
All Unplanned Losses					
Replacement	19	28	52	17	116
No Relief	38	26	20	---	84
Replacement Total (%)	33%	52%	72%	100%	58%

Pregnant women were less likely to be occupying critical billets than other personnel who left the ships. Whereas replacements were requested for 42 percent of the billets vacated due to pregnancy, replacements were needed for 62 percent of unplanned losses for other reasons. A partial explanation for this difference is the lower paygrade of pregnant women as compared to personnel who became unplanned losses for other reasons. That is, 85 percent of the pregnancy losses were E-4 and below; 48 percent of the other unplanned losses were E-4 and below.

Additionally, since commands knew in advance that they would have to leave all pregnant women behind when they deployed, replacements may have already been found for some of these women.

Personnel Manning Reports

Final PERSMARs were filed by 17 ships. Because only reasons for the loss and number of personnel lost were provided in some messages, it was not possible to determine if any service members had been cited in a predeployment EMIR. Table 4 shows the reasons why personnel did not deploy with their ship.

Table 4

Reasons Why Personnel Did Not Deploy

	Number	Percent
Disciplinary/UA	87	43
Medical	67	33
Pregnancy	17	8
Family	16	8
ADSEP	16	8

Disciplinary offenses were the primary reason for sailors to miss a deployment. This category included TEMDU to TPU (temporary duty to Transient Personnel Unit) awaiting disciplinary action, unauthorized absence, in the brig, and misconduct discharge due to drugs. Medical problems followed, accounting for 33 percent of the missing personnel. Eight percent of the service members who did not deploy were left behind because of pregnancy. Last-minute family problems and ADSEPs (due to PRT failure, personality disorder, and entry level separations) were responsible for 8 percent of the unplanned losses each. Although the data are not reflected in Table 4, 20 additional personnel whose separations were pending were also left behind. Because reason for their discharges was not indicated, these cases could not be included in the analysis.

Discussion And Conclusions

Very little objective information exists regarding the impact of pregnancy on deploying ships. Because pregnancy has become one of the few remaining sources of resistance to women assuming fully functioning roles in the Navy, it has become a highly emotional and politicized issue. Surveys of civilians and military personnel, and interviews with Navy officers measure beliefs and opinions about pregnancy that are of limited use in guiding policy. Thus, documents that exist at the headquarters of type commanders of surface ships were used to shed light on the issue.

The documentation reviewed in this study was limited to the extent that it is retained for less than 2 calendar years. However, no sampling occurred--all available documents were used. The analysis also was limited to the data that are presented in these documents. Because gender is not indicated in the reports, unplanned losses of men and women from deploying ships could not be

compared. Nevertheless, losses due to pregnancy were clearly identified, permitting the primary goal of the study to be fulfilled.

The loss of a pregnant service member was a moderately frequent reason for EMIR messages to be sent from ships to type commanders. Given the representation of women in these ships, this finding was not unexpected. The impact of pregnancy losses on the personnel readiness of the ship was less severe than losses for other reasons. This conclusion is based on the fact that 85 percent of the pregnant women were very junior and, thus, not highly trained personnel that would be difficult to replace or do without. Moreover, commands were less likely to request assignment of a replacement for a pregnant woman than they were for other losses, possibly because they had forewarning of the impending loss and someone had already been identified to take over her duties.

The messages sent by ships within 2 weeks of leaving the pier revealed that last-minute losses were most likely to be caused by disciplinary and medical reasons. Indeed, these two reasons accounted for three-fourths of all such losses. Women were no more likely to be found to be pregnant just before sailing with their shipmates than personnel were likely to have emergency family problems or do something that resulted in immediate processing for a discharge.

Even though pregnancy is not a major cause of unplanned losses from deploying ships, it represents an additional burden that did not exist prior to women being assigned to ships. Therefore, the findings of this study are not likely to satisfy critics of Navy's assignment of women to combatant ships, but it should provide objective data to guide policy.

Recommendation

Questions concerning the impact of unplanned losses on deploying ships are likely to be raised in the future. However, paper copies of message traffic in file drawers constitute such an inefficient database that analyses similar to what was performed for this study probably should not be conducted in the future. Yet, the ability to determine the causes of predeployment losses and project the number of such losses would be useful to fleet commanders. SURFPAC is now creating monthly computer disks of all messages from its ships. It is recommended that SURFLANT do likewise, using the same software and data-entry format so that Navy-wide information could be generated. Additionally, consideration should be given to electronic transmission of the information into data bases that would be maintained by the primary users. Because EMIRs are submitted by almost all activities and have several users, a system-wide analysis would need to be conducted prior to instituting new procedures.

References

Chief of Naval Operations (1979). Enlisted Transfer Manual. Washington, DC.

CINCLANTFLT/CINCPACFLT Instruction 1306.14 (1992). Washington, DC.

Roper Organization, Inc. (1992). *Attitudes regarding the assignment of women in the armed forces: The military perspective*. New York: Author

Thomas, M. D., Thomas, P. J., & McClintock, V. (1991). *Pregnant enlisted women in Navy work centers* (NPRDC-TN-91-5). San Diego: Navy Personnel Research and Development Center.

Distribution List

Deputy Assistant Secretary of Defense (Equal Opportunity) (OASD) (M,RA&L)
Executive Secretary, Defense Advisory Committee on Women in the Services (DACOWITS) (35)
Deputy, Under Secretary of the Navy, A&T (R&E)
Assistant Secretary of the Navy (Manpower and Reserve Affairs)
Chief of Naval Operations (N813)
Chief of Naval Personnel (PERS-00W), (PERS-05)
Director, Defense Personnel Security Research and Education Center
Commander in Chief, U.S. Atlantic Fleet (N1)
Commander in Chief, U.S. Pacific Fleet (N1)
Commander, Naval Air Force, U.S. Atlantic Fleet (N1)
Commander, Naval Air Force, U.S. Pacific Fleet (N1)
Director, ARI, Alexandria, VA (PERI-ZT)
Human Resources Directorate, Technical Library, AL/HR-SDKL, Brooks Air Base, TX
Defense Equal Opportunity Management Institute, Directorate of Research/DPR, Library, Patrick
Air Force Base, FL
Library, Defense Equal Opportunity Management Institute, Patrick Air Force Base, FL
Commandant, U.S. Coast Guard Headquarters
Naval Postgraduate School
Superintendent, U.S. Coast Guard Academy (DH)
Commanding Officer, U.S. Coast Guard Institute
Director of Research, U.S. Naval Academy
Center for Naval Analyses, Acquisition Unit
Pentagon Library
Defense Technical Information Center (DTIC) (4)